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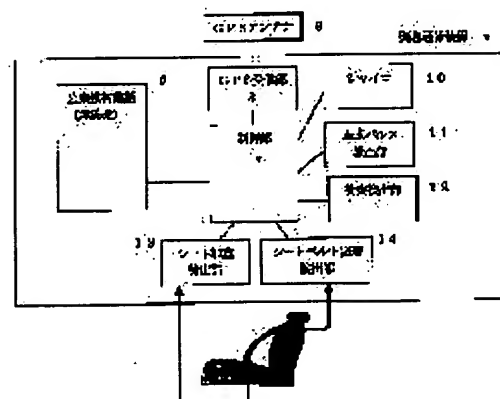
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(54) METHOD AND DEVICE FOR EMERGENCY REPORTING AND VEHICLE EMERGENCY REPORTING SYSTEM

(57)Abstract:

PROBLEM TO BE SOLVED: To provide an emergency reporting method and device with which a center operator can easily grasp an accident situation and the number of passengers by detecting the number of passengers with a seat sensor or a seatbelt fastening sensor provided to an on-vehicle machine which detects weight applied to seat and transmitting the number of the passengers in addition to position information and accident situation information with radio equipment.

SOLUTION: This emergency reporting device 5 mounted on a vehicle is provided with a GPS receiving part 8 which is connected to a GPS antenna 9 and receives data from a GPS satellite, a gyroscope 10, a vehicle speed pulse detecting part (speed sensor) 11, a collision detecting part (collision sensor) 12, a seat weight detecting part (seat sensor) 13 detecting seat weight applied to a sheet, a seatbelt fastening detecting part (seatbelt fastening sensor) 14 detecting that a seatbelt is fastened and a public portable telephone (radio equipment) 6 and is further provided with a controlling part 7 controlling them.



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CLAIMS

[Claim(s)]

[Claim 1] An emergency call method including a phase which detects a load to a sheet and detects the number of crew staffs, and a phase of transmitting said number information of crew staffs to a center through a mobile communication line at the time of an emergency call in addition to positional information and accident status information.

[Claim 2] An emergency call method including a phase which detects a wearing condition of a seat belt and detects the number of crew staffs, and a phase of transmitting the number information of crew staffs to a center through a mobile communication line at the time of an emergency call in addition to positional information and accident status information.

[Claim 3] An emergency call method including a phase which detects a load to a sheet, or detects a wearing condition of a seat belt, and detects the number of crew staffs, and a phase of transmitting the number information of crew staffs to a center through a mobile communication line at the time of an emergency call in addition to positional information and accident status information.

[Claim 4] An emergency call unit which possesses a means to transmit the number information of entrainment staffs for positional information and the number information of entrainment staffs which used a sheet sensor which detects a load to a sheet to collection, and a means to store and a center, through a mobile communication line, in the center which detects emergencies, such as the occurrence of vehicles of accident, and performs relief rescue etc. through a mobile communication line.

[Claim 5] An emergency call unit which possesses a means to transmit the number information of entrainment staffs for positional information and the number information of entrainment staffs which used a seat belt wearing sensor to collection, and a means to store and a center, through a mobile communication line, in the center which detects emergencies, such as the occurrence of vehicles of accident, and performs relief rescue etc. through a mobile communication line.

[Claim 6] a center which detects emergencies, such as the occurrence of vehicles of accident, and performs relief rescue etc. through a mobile communication line -- positional information -- and incorrect detection generated when it is always in a wearing condition like the time of seat belt un-equipping, and an infant seat by using together a sheet sensor and a seat belt wearing sensor which detect a load to a sheet -- eliminating -- the number information of entrainment staffs -- collection -- and An emergency call unit possessing a means to store, and a means to transmit the number information of entrainment staffs to a center through a mobile communication line.

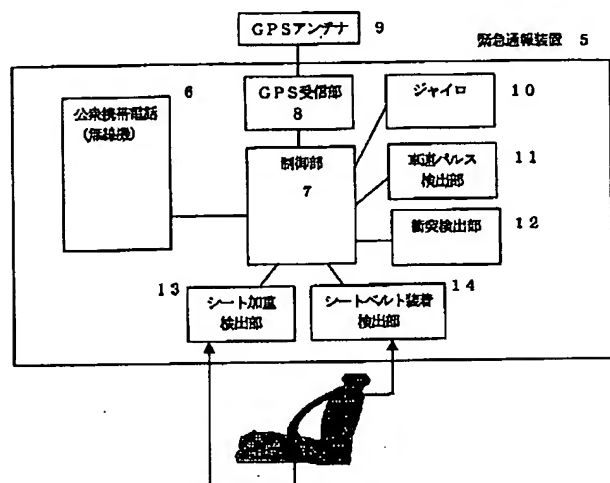
[Claim 7] An emergency reporting system which has a center emergency information display characterized by providing the following An emergency call unit which possesses a means to transmit the number information of entrainment staffs for positional information and the number information of entrainment staffs which used a sheet sensor which detects a load to a sheet to collection, and a means to store and a center, through a mobile communication line; in the center which detects emergencies, such as the occurrence of vehicles of accident, and performs relief rescue etc. through a mobile communication line A

means to display an on-site location and the number of entrainment staffs based on positional information notified from an emergency call unit of accident vehicles, and the number information of entrainment staffs A means to notify a relief engine based on positional information notified from an emergency call unit of accident vehicles

[Claim 8] An emergency reporting system which has a center emergency information display characterized by providing the following An emergency call unit which possesses a means to transmit the number information of entrainment staffs for positional information and the number information of entrainment staffs which used a seat belt wearing sensor to collection, and a means to store and a center, through a mobile communication line, in the center which detects emergencies, such as the occurrence of vehicles of accident, and performs relief rescue etc. through a mobile communication line A means to display an on-site location and the number of entrainment staffs based on positional information notified from an emergency call unit of accident vehicles, and the number information of entrainment staffs A means to notify a relief engine based on positional information notified from an emergency call unit of accident vehicles

[Claim 9] An emergency reporting system which has a center emergency information display characterized by providing the following a center which detects emergencies, such as the occurrence of vehicles of accident, and performs relief rescue etc. through a mobile communication line -- positional information -- and incorrect detection generated when it is always in a wearing condition like the time of seat belt un-equipping, and an infant seat by using together a sheet sensor and a seat belt-wearing sensor which detect a load to a sheet -- eliminating -- the number information of entrainment staffs -- collection -- and An emergency call unit possessing a means to store, and a means to transmit the number information of entrainment staffs to a center through a mobile communication line A means to display an on-site location and the number of entrainment staffs based on positional information notified from an emergency call unit of accident vehicles, and the number information of entrainment staffs A means to notify a relief engine based on positional information notified from an emergency call unit of accident vehicles

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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[The technical field to which invention belongs] Especially this invention detects the number of entrainment staffs about the emergency call method and equipment using the sheet sensor which detects the load to a sheet, or a seat belt wearing sensor, and it constitutes it so that the number of entrainment staffs may be transmitted to a center with accident data at the time of the occurrence of accident.

[0002]

[Description of the Prior Art] In the traffic accident, time amount until it treats from the occurrence of accident to the beginning is closely concerned with the survival rate. Therefore, as shown in drawing 1, vehicles emergency intelligence is automatically notified to the urgent center 2 from the emergency call unit carried in the accident vehicles 1 at the time of the occurrence of accident of the collision of vehicles etc., and the vehicles emergency reporting system aiming at reduction of the death toll or the number of severely handicapped persons is proposed by shortening time amount until the urgent vehicles 4 arrive at an accident site, and enabling it to rescue and relieve a wounded person more nearly promptly. In such a vehicles emergency reporting system, in order to perform the mobilization request of the emergency vehicles 4 in addition to the on-site location at the time of the occurrence of accident, the technology which receives the information for grasping the number of staffs which has taken the accident vehicles 1 is indispensable.

[0003] Usually, the emergency call unit carried in vehicles is equipped with the following functions.

- (1) Communication facility : it has the same communication facility as a portable telephone, and the automatic change to data communication and voice communication is enabled.
- (2) Location detection function : record self-vehicle location data, such as a sensor and a gyroscope, whenever [GPS or vehicle speed] as data for vehicles location detection.
- (3) Urgent detection function : it has a collision location detection sensor and a sideslip sensor, and detect what kind of accident occurred.
- (4) Vehicles emergency call function : start an emergency call by detection of a collision location detection sensor or a sideslip sensor, and perform the automatic transmission of the recorded self-vehicle location data. The manual report by the depression of a vehicles emergency intelligence report carbon button is also enabled.

[0004] Giving the position-report function at the time of the occurrence of accident to the navigation equipment which displays the transit location of vehicles like this emergency call unit is proposed. For example, this kind of navigation equipment is indicated by JP,5-5626,A.

[0005] The location device with which this equipment asks for the self-vehicle location of vehicles, and the acceleration sensor as an accident occurrence detection means, It has the control apparatus which memorizes the self-vehicle location data for which the location device asked, and is outputted at the time of the occurrence of accident, and the communication device which is the transmitting means of data. A

location device The bearing sensor which detects transit bearing of vehicles, and the distance robot which detects the mileage of vehicles, It has the absolute location decision sensor which receives GPS data, CDROM in which the telephone number of map data or a contact was stored, and CPU displayed on a display in quest of a self-vehicle location from the information on each sensor.

[0006] And if vehicles encounter accident, it is automatically transmitted by the trauma center, and the self-vehicle location data currently recorded on the emergency call unit of accident vehicles will check the location of accident vehicles based on this data, and will demand mobilization of urgent vehicles in a trauma center.

[0007]
[Problem(s) to be Solved by the Invention] In the conventional emergency reporting system, an automobile accident occurs and the problem that it cannot judge whether the wounded person of a multiple name generates [crew] urgent vehicles (ambulance) in plurality in case a mobilization request is performed to an accident site, and it is necessary to mobilize two or more ambulances exists.

[0008] This invention detects the number of crew staffs by the sheet sensor which detects the load to a sheet to a mounted machine (emergency call unit), or the seat belt wearing sensor, and as it transmits the above-mentioned number of crew staffs from a walkie-talkie in addition to positional information and accident status information, it aims at offering the emergency call method and equipment with which a center operator can grasp an accident condition and the number of entrainment staffs easily.

[0009]
[Means for Solving the Problem] In order to solve the above-mentioned technical problem, a sensor, a collision sensor, a public cellular phone (walkie-talkie), and a load to a sheet constitute from a sheet sensor or a seat belt wearing sensor which detects an emergency call unit carried in vehicles, in addition to calculation of a vehicles location, the number of entrainment staffs is detected, and on-site positional information and the number information of entrainment staffs transmit to a center by data communication whenever [GPS, gyroscope, and vehicle-speed] in this invention at an emergency call unit at the time of the occurrence of accident.

[0010] Moreover, he is trying to express a received on-site location and the number of entrainment staffs as center equipment.

[0011] By having considered as such a configuration, a center equipment operator becomes possible [performing a mobilization request of suitable urgent vehicles] by grasping an accident condition and the number of entrainment staffs.

[0012]
[Embodiment of the Invention] A center operator has an operation that performing the mobilization request of suitable urgent vehicles makes it possible, by grasping an accident condition and the number of entrainment staffs by including the phase which invention of this invention according to claim 1 detects the load to a sheet, and detects the number of crew staffs, and the phase of transmitting said number information of crew staffs to a center through a mobile communication line at the time of an emergency call in addition to positional information and accident status information.

[0013] A center operator has an operation that performing the mobilization request of suitable urgent vehicles makes it possible, by grasping an accident condition and the number of entrainment staffs by including the phase which invention of this invention according to claim 2 detects the wearing condition of a seat belt, and detects the number of crew staffs, and the phase transmit the number information of crew staffs to a center through a mobile communication line at the time of an emergency call in addition to positional information and accident status information.

[0014] The phase which invention of this invention according to claim 3 detects the load to a sheet, or detects the wearing condition of a seat belt, and detects the number of crew staffs, By including the phase of transmitting the number information of crew staffs to a center through a mobile communication line at the time of an emergency call in addition to positional information and accident status information, a center

operator It has an operation that performing the mobilization request of suitable urgent vehicles makes it possible, by grasping an accident condition and the number of entrainment staffs.

[0015] the center which invention of this invention according to claim 4 detects emergencies, such as the occurrence of vehicles of accident, and performs relief rescue etc. through a mobile communication line -- positional information -- and By providing a means to transmit the number information of entrainment staffs for the number information of entrainment staffs which used the sheet sensor which detects the load to a sheet to collection, and a means to store and a center, through a mobile communication line It has an operation that performing the mobilization request of suitable urgent vehicles makes it possible, by grasping an accident condition and the number of entrainment staffs.

[0016] the center which invention of this invention according to claim 5 detects emergencies, such as the occurrence of vehicles of accident, and performs relief rescue etc. through a mobile communication line -- positional information -- and By providing a means to transmit the number information of entrainment staffs for the number information of entrainment staffs which used the seat belt wearing sensor to collection, and a means to store and a center, through a mobile communication line It has an operation that performing the mobilization request of suitable urgent vehicles makes it possible, by grasping an accident condition and the number of entrainment staffs.

[0017] the center which invention of this invention according to claim 6 detects emergencies, such as the occurrence of vehicles of accident, and performs relief rescue etc. through a mobile communication line -- positional information -- and the incorrect detection generated when it is always in a wearing condition like the time of seat belt un-equipping, and an infant seat by using together the sheet sensor and seat belt wearing sensor which detect the load to a sheet -- eliminating -- the number information of entrainment staffs -- collection -- and By providing a means to store, and a means to transmit the number information of entrainment staffs to a center through a mobile communication line, it has an operation that performing the mobilization request of suitable urgent vehicles makes it possible, by grasping an accident condition and the number of entrainment staffs.

[0018] the center which invention of this invention according to claim 7 detects emergencies, such as the occurrence of vehicles of accident, and performs relief rescue etc. through a mobile communication line -- positional information -- and The emergency call unit possessing a means to transmit the number information of entrainment staffs for the number information of entrainment staffs which used the sheet sensor which detects the load to a sheet to collection, and a means to store and a center, through a mobile communication line, A means to display an on-site location and the number of entrainment staffs based on the positional information notified from the emergency call unit of accident vehicles, and the number information of entrainment staffs, It is the emergency reporting system which has a center emergency information display possessing a means to notify the relief engine based on the positional information notified from the emergency call unit of accident vehicles. It has an operation that performing the mobilization request of suitable urgent vehicles makes it possible, by grasping compaction, and an accident condition and the number of entrainment staffs for the time of arrival to the accident site of urgent vehicles.

[0019] the center which invention of this invention according to claim 8 detects emergencies, such as the occurrence of vehicles of accident, and performs relief rescue etc. through a mobile communication line -- positional information -- and The emergency call unit possessing a means to transmit the number information of entrainment staffs for the number information of entrainment staffs which used the seat belt wearing sensor to collection, and a means to store and a center, through a mobile communication line, A means to display an on-site location and the number of entrainment staffs based on the positional information notified from the emergency call unit of accident vehicles, and the number information of entrainment staffs, It is the emergency reporting system which has a center emergency information display possessing a means to notify the relief engine based on the positional information notified from the emergency call unit of accident vehicles. It has an operation that performing the mobilization request of

suitable urgent vehicles makes it possible, by grasping compaction, and an accident condition and the number of entrainment staffs for the time of arrival to the accident site of urgent vehicles.

[0020] the center which invention of this invention according to claim 9 detects emergencies, such as the occurrence of vehicles of accident, and performs relief rescue etc. through a mobile communication line -- positional information -- and the incorrect detection generated when it is always in a wearing condition like the time of seat belt un-equipping, and an infant seat by using together the sheet sensor and seat belt wearing sensor which detect the load to a sheet -- eliminating -- the number information of entrainment staffs -- collection -- and The emergency call unit possessing a means to store, and a means to transmit the number information of entrainment staffs to a center through a mobile communication line, A means to display an on-site location and the number of entrainment staffs based on the positional information notified from the emergency call unit of accident vehicles, and the number information of entrainment staffs, It is the emergency reporting system which has a center emergency information display possessing a means to notify the relief engine based on the positional information notified from the emergency call unit of accident vehicles. It has an operation that performing the mobilization request of suitable urgent vehicles makes it possible, by grasping compaction, and an accident condition and the number of entrainment staffs for the time of arrival to the accident site of urgent vehicles.

[0021] Hereafter, the gestalt of operation of this invention is explained using a drawing. Drawing 2 is drawing showing the outline configuration of the emergency call unit concerning the gestalt of operation of this invention. The emergency call unit 5 carried in vehicles in drawing 2 It connects with the GPS antenna 9. Data from a GPS Satellite Having been equipped with the GPS receive section 8 which receives, a gyroscope 10, the vehicle speed pulse detecting element (whenever [vehicle speed] sensor) 11, the collision-detection section (collision sensor) 12, the sheet load detecting element (sheet sensor) 13 that detects the sheet load which joins a sheet, and the seat belt It has the seat belt wearing detecting element (seat belt wearing sensor) 14 to detect and the public cellular phone (walkie-talkie) 6, and consists of control sections 7 which control these further.

[0022] And calculation of the vehicles location according to the GPS receive section 8 and a gyroscope 10 with an emergency call unit 5, Moreover, information is accumulated [whenever / vehicle speed] whenever [vehicle speed] for every change and every fixed time amount by the vehicle speed pulse detecting element (whenever [vehicle speed] sensor) 11. Furthermore, the sheet load which joins a sheet by the sheet load detecting element (sheet sensor) 13 is detected. Or it accumulates in the memory which detects having been equipped with the seat belt by the seat belt wearing detecting element (seat belt wearing sensor) 14, computes an entrainment manpower number from these data, and is not illustrating a control section 7.

[0023] And if the collision-detection section (collision sensor) 12 operates at the time of the occurrence of accident, information and the number of entrainment staffs will be transmitted to a trauma center (refer to drawing 1) by data communication whenever [on-site positional information / which has been accumulated from the public cellular phone (walkie-talkie) 6 / , and vehicle speed].

[0024]

[Effect of the Invention] As mentioned above, a center operator has the effect it is ineffective to it being possible to perform the mobilization request of suitable urgent vehicles by grasping an accident condition and the number of entrainment staffs by including the phase which detects the load to a sheet and detects the number of crew staffs by the emergency call method of this invention, and the phase transmit said number information of crew staffs to a center through a mobile communication line at the time of an emergency call in addition to positional information and accident status information.

[0025] the center which detects emergencies, such as the occurrence of vehicles of accident, and performs relief rescue etc. through a mobile communication line in the emergency call unit of this invention -- positional information -- and By providing a means to transmit the number information of entrainment staffs for the number information of entrainment staffs which used the sheet sensor which detects the load to a

sheet to collection, and a means to store and a center, through a mobile communication line. It has the effect it is ineffective to it being possible to perform the mobilization request of suitable urgent vehicles by grasping an accident condition and the number of entrainment staffs.

[0026] the center which detects emergencies, such as the occurrence of vehicles of accident, and performs relief rescue etc. through a mobile communication line in the emergency reporting system of this invention - positional information -- and The emergency call unit possessing a means to transmit the number information of entrainment staffs for the number information of entrainment staffs which used the sheet sensor which detects the load to a sheet to collection, and a means to store and a center, through a mobile communication line, A means to display an on-site location and the number of entrainment staffs based on the positional information notified from the emergency call unit of accident vehicles, and the number information of entrainment staffs, It is what has a center emergency information display possessing a means to notify the relief engine based on the positional information notified from the emergency call unit of accident vehicles. It has the effect it is ineffective to it being possible to perform the mobilization request of suitable urgent vehicles by grasping compaction, and an accident condition and the number of entrainment staffs for the time of arrival to the accident site of urgent vehicles.

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TECHNICAL FIELD

[A technical field to which invention belongs] Especially this invention detects the number of entrainment staffs about an emergency call method and equipment using a sheet sensor which detects a load to a sheet, or a seat belt wearing sensor, and it constitutes it so that the number of entrainment staffs may be transmitted to a center with accident data at the time of the occurrence of accident.

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PRIOR ART

[Description of the Prior Art] In the traffic accident, time amount until it treats from the occurrence of accident to the beginning is closely concerned with the survival rate. Therefore, as shown in drawing 1, vehicles emergency intelligence is automatically notified to the urgent center 2 from the emergency call unit carried in the accident vehicles 1 at the time of the occurrence of accident of the collision of vehicles etc., and the vehicles emergency reporting system aiming at reduction of the death toll or the number of severely handicapped persons is proposed by shortening time amount until the urgent vehicles 4 arrive at an accident site, and enabling it to rescue and relieve a wounded person more nearly promptly. In such a vehicles emergency reporting system, in order to perform the mobilization request of the emergency vehicles 4 in addition to the on-site location at the time of the occurrence of accident, the technology which receives the information for grasping the number of staffs which has taken the accident vehicles 1 is indispensable.

[0003] Usually, the emergency call unit carried in vehicles is equipped with the following functions.

- (1) Communication facility : it has the same communication facility as a portable telephone, and the automatic change to data communication and voice communication is enabled.
- (2) Location detection function : record self-vehicle location data, such as a sensor and a gyroscope, whenever [GPS or vehicle speed] as data for vehicles location detection.
- (3) Urgent detection function : it has a collision location detection sensor and a sideslip sensor, and detect what kind of accident occurred.
- (4) Vehicles emergency call function : start an emergency call by detection of a collision location detection sensor or a sideslip sensor, and perform the automatic transmission of the recorded self-vehicle location data. The manual report by the depression of a vehicles emergency intelligence report carbon button is also enabled.

[0004] Giving the position-report function at the time of the occurrence of accident to the navigation equipment which displays the transit location of vehicles like this emergency call unit is proposed. For example, this kind of navigation equipment is indicated by JP,5-5626,A.

[0005] The location device with which this equipment asks for the self-vehicle location of vehicles, and the acceleration sensor as an accident occurrence detection means, It has the control apparatus which memorizes the self-vehicle location data for which the location device asked, and is outputted at the time of the occurrence of accident, and the communication device which is the transmitting means of data. A location device The bearing sensor which detects transit bearing of vehicles, and the distance robot which detects the mileage of vehicles, It has the absolute location decision sensor which receives GPS data, CDROM in which the telephone number of map data or a contact was stored, and CPU displayed on a display in quest of a self-vehicle location from the information on each sensor.

[0006] And if vehicles encounter accident, it is automatically transmitted by the trauma center, and the self-vehicle location data currently recorded on the emergency call unit of accident vehicles will check the location of accident vehicles based on this data, and will demand mobilization of urgent vehicles in a

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EFFECT OF THE INVENTION

[Effect of the Invention] As mentioned above, a center operator has the effect it is ineffective to it being possible to perform the mobilization request of suitable urgent vehicles by grasping an accident condition and the number of entrainment staffs by including the phase which detects the load to a sheet and detects the number of crew staffs by the emergency call method of this invention, and the phase transmit said number information of crew staffs to a center through a mobile communication line at the time of an emergency call in addition to positional information and accident status information.

[0025] Emergencies, such as the occurrence of vehicles of accident, are detected in the emergency call unit of this invention. It has the effect it is ineffective to it being possible to perform the mobilization request of suitable urgent vehicles by grasping an accident condition and the number of entrainment staffs by providing a means transmit the number information of entrainment staffs for positional information and the number information of entrainment staffs which used the sheet sensor which detects the load to a sheet through a mobile communication line to collection, and a means store and a center, in the center which performs relief rescue etc. through a mobile communication line.

[0026] Emergencies, such as the occurrence of vehicles of accident, are detected in the emergency reporting system of this invention. the center which performs relief rescue etc. through a mobile communication line -- positional information -- and The emergency call unit possessing a means to transmit the number information of entrainment staffs for the number information of entrainment staffs which used the sheet sensor which detects the load to a sheet to collection, and a means to store and a center, through a mobile communication line, A means to display an on-site location and the number of entrainment staffs based on the positional information notified from the emergency call unit of accident vehicles, and the number information of entrainment staffs, It is what has a center emergency information display possessing a means to notify the relief engine based on the positional information notified from the emergency call unit of accident vehicles. It has the effect it is ineffective to it being possible to perform the mobilization request of suitable urgent vehicles by grasping compaction, and an accident condition and the number of entrainment staffs for the time of arrival to the accident site of urgent vehicles.

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TECHNICAL PROBLEM

[Problem(s) to be Solved by the Invention] In the conventional emergency reporting system, an automobile accident occurs and the problem that it cannot judge whether the wounded person of a multiple name generates [crew] urgent vehicles (ambulance) in plurality in case a mobilization request is performed to an accident site, and it is necessary to mobilize two or more ambulances exists.

[0008] This invention detects the number of crew staffs by the sheet sensor which detects the load to a sheet to a mounted machine (emergency call unit), or the seat belt wearing sensor, and as it transmits the above-mentioned number of crew staffs from a walkie-talkie in addition to positional information and accident status information, it aims at offering the emergency call method and equipment with which a center operator can grasp an accident condition and the number of entrainment staffs easily.

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MEANS

[Means for Solving the Problem] In order to solve the above-mentioned technical problem, a sensor, a collision sensor, a public cellular phone (walkie-talkie), and a load to a sheet constitute from a sheet sensor or a seat belt wearing sensor which detects an emergency call unit carried in vehicles, in addition to calculation of a vehicles location, the number of entrainment staffs is detected, and on-site positional information and the number information of entrainment staffs transmit to a center by data communication whenever [GPS, gyroscope, and vehicle-speed] in this invention at an emergency call unit at the time of the occurrence of accident.

[0010] Moreover, he is trying to express a received on-site location and the number of entrainment staffs as center equipment.

[0011] By having considered as such a configuration, a center equipment operator becomes possible [performing a mobilization request of suitable urgent vehicles] by grasping an accident condition and the number of entrainment staffs.

[0012]

[Embodiment of the Invention] A center operator has an operation that performing the mobilization request of suitable urgent vehicles makes it possible, by grasping an accident condition and the number of entrainment staffs by including the phase which invention of this invention according to claim 1 detects the load to a sheet, and detects the number of crew staffs, and the phase of transmitting said number information of crew staffs to a center through a mobile communication line at the time of an emergency call in addition to positional information and accident status information.

[0013] A center operator has an operation that performing the mobilization request of suitable urgent vehicles makes it possible, by grasping an accident condition and the number of entrainment staffs by including the phase which invention of this invention according to claim 2 detects the wearing condition of a seat belt, and detects the number of crew staffs, and the phase transmit the number information of crew staffs to a center through a mobile communication line at the time of an emergency call in addition to positional information and accident status information.

[0014] The phase which invention of this invention according to claim 3 detects the load to a sheet, or detects the wearing condition of a seat belt, and detects the number of crew staffs, By including the phase of transmitting the number information of crew staffs to a center through a mobile communication line at the time of an emergency call in addition to positional information and accident status information, a center operator It has an operation that performing the mobilization request of suitable urgent vehicles makes it possible, by grasping an accident condition and the number of entrainment staffs.

[0015] the center which invention of this invention according to claim 4 detects emergencies, such as the occurrence of vehicles of accident, and performs relief rescue etc. through a mobile communication line -- positional information -- and By providing a means to transmit the number information of entrainment staffs for the number information of entrainment staffs which used the sheet sensor which detects the load to a sheet to collection, and a means to store and a center, through a mobile communication line It has an

operation that performing the mobilization request of suitable urgent vehicles makes it possible, by grasping an accident condition and the number of entrainment staffs.

[0016] the center which invention of this invention according to claim 5 detects emergencies, such as the occurrence of vehicles of accident, and performs relief rescue etc. through a mobile communication line -- positional information -- and By providing a means to transmit the number information of entrainment staffs for the number information of entrainment staffs which used the seat belt wearing sensor to collection, and a means to store and a center, through a mobile communication line It has an operation that performing the mobilization request of suitable urgent vehicles makes it possible, by grasping an accident condition and the number of entrainment staffs.

[0017] the center which invention of this invention according to claim 6 detects emergencies, such as the occurrence of vehicles of accident, and performs relief rescue etc. through a mobile communication line -- positional information -- and the incorrect detection generated when it is always in a wearing condition like the time of seat belt un-equipping, and an infant seat by using together the sheet sensor and seat belt wearing sensor which detect the load to a sheet -- eliminating -- the number information of entrainment staffs -- collection -- and By providing a means to store, and a means to transmit the number information of entrainment staffs to a center through a mobile communication line, it has an operation that performing the mobilization request of suitable urgent vehicles makes it possible, by grasping an accident condition and the number of entrainment staffs.

[0018] the center which invention of this invention according to claim 7 detects emergencies, such as the occurrence of vehicles of accident, and performs relief rescue etc. through a mobile communication line -- positional information -- and The emergency call unit possessing a means to transmit the number information of entrainment staffs for the number information of entrainment staffs which used the sheet sensor which detects the load to a sheet to collection, and a means to store and a center, through a mobile communication line, A means to display an on-site location and the number of entrainment staffs based on the positional information notified from the emergency call unit of accident vehicles, and the number information of entrainment staffs, It is the emergency reporting system which has a center emergency information display possessing a means to notify the relief engine based on the positional information notified from the emergency call unit of accident vehicles. It has an operation that performing the mobilization request of suitable urgent vehicles makes it possible, by grasping compaction, and an accident condition and the number of entrainment staffs for the time of arrival to the accident site of urgent vehicles.

[0019] the center which invention of this invention according to claim 8 detects emergencies, such as the occurrence of vehicles of accident, and performs relief rescue etc. through a mobile communication line -- positional information -- and The emergency call unit possessing a means to transmit the number information of entrainment staffs for the number information of entrainment staffs which used the seat belt wearing sensor to collection, and a means to store and a center, through a mobile communication line, A means to display an on-site location and the number of entrainment staffs based on the positional information notified from the emergency call unit of accident vehicles, and the number information of entrainment staffs, It is the emergency reporting system which has a center emergency information display possessing a means to notify the relief engine based on the positional information notified from the emergency call unit of accident vehicles. It has an operation that performing the mobilization request of suitable urgent vehicles makes it possible, by grasping compaction, and an accident condition and the number of entrainment staffs for the time of arrival to the accident site of urgent vehicles.

[0020] the center which invention of this invention according to claim 9 detects emergencies, such as the occurrence of vehicles of accident, and performs relief rescue etc. through a mobile communication line -- positional information -- and the incorrect detection generated when it is always in a wearing condition like the time of seat belt un-equipping, and an infant seat by using together the sheet sensor and seat belt wearing sensor which detect the load to a sheet -- eliminating -- the number information of entrainment

staffs -- collection -- and The emergency call unit possessing a means to store, and a means to transmit the number information of entrainment staffs to a center through a mobile communication line, A means to display an on-site location and the number of entrainment staffs based on the positional information notified from the emergency call unit of accident vehicles, and the number information of entrainment staffs, It is the emergency reporting system which has a center emergency information display possessing a means to notify the relief engine based on the positional information notified from the emergency call unit of accident vehicles. It has an operation that performing the mobilization request of suitable urgent vehicles makes it possible, by grasping compaction, and an accident condition and the number of entrainment staffs for the time of arrival to the accident site of urgent vehicles.

[0021] Hereafter, the gestalt of operation of this invention is explained using a drawing. Drawing 2 is drawing showing the outline configuration of the emergency call unit concerning the gestalt of operation of this invention. The emergency call unit 5 carried in vehicles in drawing 2 It connects with the GPS antenna 9. Data from a GPS Satellite Having been equipped with the GPS receive section 8 which receives, a gyroscope 10, the vehicle speed pulse detecting element (whenever [vehicle speed] sensor) 11, the collision-detection section (collision sensor) 12, the sheet load detecting element (sheet sensor) 13 that detects the sheet load which joins a sheet, and the seat belt It has the seat belt wearing detecting element (seat belt wearing sensor) 14 to detect and the public cellular phone (walkie-talkie) 6, and consists of control sections 7 which control these further.

[0022] And calculation of the vehicles location according to the GPS receive section 8 and a gyroscope 10 with an emergency call unit 5, Moreover, information is accumulated [whenever / vehicle speed] whenever [vehicle speed] for every change and every fixed time amount by the vehicle speed pulse detecting element (whenever [vehicle speed] sensor) 11. Furthermore, the sheet load which joins a sheet by the sheet load detecting element (sheet sensor) 13 is detected. Or it accumulates in the memory which detects having been equipped with the seat belt by the seat belt wearing detecting element (seat belt wearing sensor) 14, computes an entrainment manpower number from these data, and is not illustrating a control section 7.

[0023] And if the collision-detection section (collision sensor) 12 operates at the time of the occurrence of accident, information and the number of entrainment staffs will be transmitted to a trauma center (refer to drawing 1) by data communication whenever [on-site positional information / which has been accumulated from the public cellular phone (walkie-talkie) 6 / , and vehicle speed].

[Translation done.]

* NOTICES *

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1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. **** shows the word which can not be translated.
3. In the drawings, any words are not translated.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

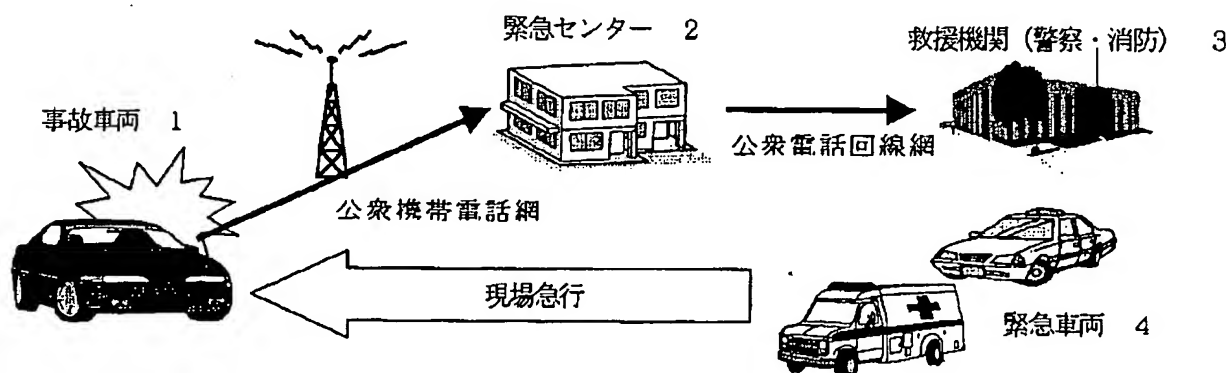
[Drawing 1] Drawing showing the outline configuration of an emergency reporting system,

[Drawing 2] It is drawing showing the outline configuration of the emergency call unit concerning the gestalt of operation of this invention.

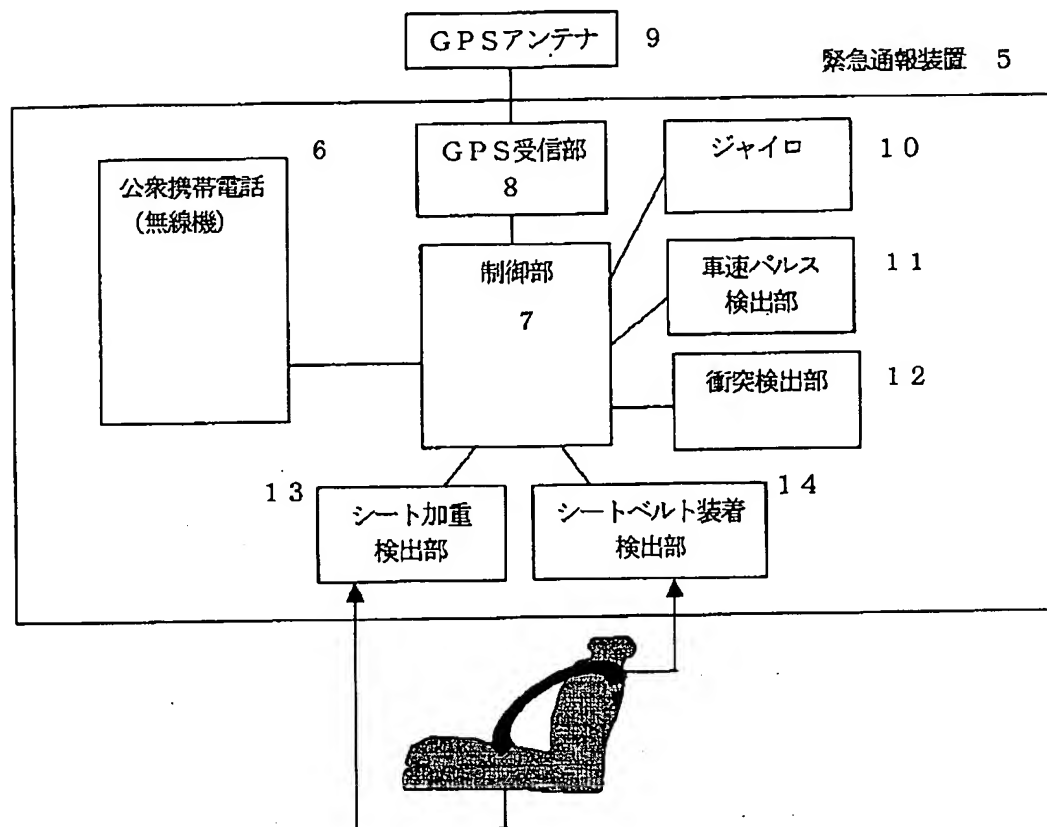
[Description of Notations]

- 1 Accident Vehicles
- 2 Trauma Center
- 3 Relief Engine (Police and Fire Fighting)
- 4 Urgent Vehicles
- 5 Emergency Call Unit
- 6 Public Cellular Phone (Walkie-talkie)
- 7 Control Section
- 8 GPS Receive Section
- 9 GPS Antenna
- 10 Gyroscope
- 11 Vehicle Speed Pulse Detecting Element
- 12 Collision-Detection Section
- 13 Sheet Load Detecting Element
- 14 Seat Belt Wearing Detecting Element

[Translation done.]

Drawing selection ☒

[Translation done.]

Drawing selection 

[Translation done.]